

## Application for Industrial Wastes Discharge Permit

Date 015-7-79  
 A. Name of Organization Fairchild Semiconductor, A Division of Fairchild  
 Address Camera and Instrument Corporation, 464 Ellis St., Mt. View, Calif. 94042  
 Address of Point of Discharge 441 Whisman Rd., Mt. View, Bldg. 13  
 Individual Responsible Name Bernard Yurash Telephone (415) 962-2346  
 for industrial waste Signature Bernard Yurash  
 Attach Map Showing Point of Discharge, Sampling Points, and Waste Treatment Facility.

B. Flow Rate: Average 210,000 gals/day Max. 210,000 gals/day Peak Hourly 146 GPM

## C. Submit separate statement:

1. Detailing type of industry and nature of products
2. Listing chemicals used and approximate concentrations
3. Describing waste treatment facilities
4. Giving characteristics of exceptional industrial wastes
5. Concerning radioactive wastes
6. Naming organic solvents discharged and concentration at point of discharge

## D. Indicate the point of discharge concentration of the following characteristics and mass emission rates where applicable.

Biochemical oxygen demand (B.O.D.)	<u>50</u> mg/l	Grease and oil, total	<u>0.0</u> mg/l
Chemical oxygen demand (C.O.D.)	<u>100</u> mg/l	Hydrogen Ion content pH	<u>5.5 to 10.0</u>
Total Solids, Average	<u>500</u> mg/l	Fluoride	<u>1.5</u> mg/l
Suspended Solids, Average	<u>200</u> mg/l	Chlorine demand	<u>5</u> mg/l
Temperature	<u>70</u> °F		

	Max. Conc. Allowable mg/l	Allowable Mass Emission Rate kg/day		Max. Conc. Allowable mg/l	Allowable Mass Emission Rate kg/day
Arsenic	<u>0.1</u>	<u>0.01</u>	Formaldehyde	<u>5.0</u>	<u>0.5</u>
Barium	<u>5.0</u>	<u>0.5</u>	Lead	<u>0.5</u>	<u>0.05</u>
Beryllium	<u>1.0</u>	<u>0.1</u>	Manganese	<u>1.0</u>	<u>0.1</u>
Boron	<u>1.0</u>	<u>0.1</u>	Mercury	<u>0.05</u>	<u>0.005</u>
Chlorine	<u>50.0</u>	<u>5.0</u>	Nickel	<u>1.0</u>	<u>0.1</u>
Cadmium	<u>0.1</u>	<u>0.01</u>	Chloroform	<u>50.0</u>	<u>5.0</u>
Chromium Hexavalent	<u>1.0</u>	<u>0.1</u>	Phenols	<u>1.0</u>	<u>0.1</u>
Chromium Total	<u>2.0</u>	<u>0.2</u>	Selenium	<u>2.0</u>	<u>0.2</u>
Cobalt	<u>1.0</u>	<u>0.1</u>	Silver	<u>5.0</u>	<u>0.5</u>
Copper	<u>1.0</u>	<u>0.1</u>	Zinc	<u>5.0</u>	<u>0.5</u>
Cresols	<u>2.0</u>	<u>0.2</u>			
Cyanides	<u>1.0</u>	<u>0.1</u>			

## NOT TO BE COMPLETED BY APPLICANT

Permit to Discharge Industrial Wastes in Accordance with This Application Approved Subject to Attached General and Specific Conditions

Allen Shelley, Director of Public Works

Signature Allen Shelley

Date April 13, 1976

Permit to Discharge Exceptional Industrial Waste Approved  
 List Details:

Allen Shelley, Director of Public Works

Signature \_\_\_\_\_

Date \_\_\_\_\_

DISTRIBUTION: Original to Industrial Waste File, Copy to Discharger, Copy to Water Quality Control Plant, Copy to Palo Alto, Copy to Sewer Division.

CITY OF MOUNTAIN VIEW

Industrial Waste Discharge Permit

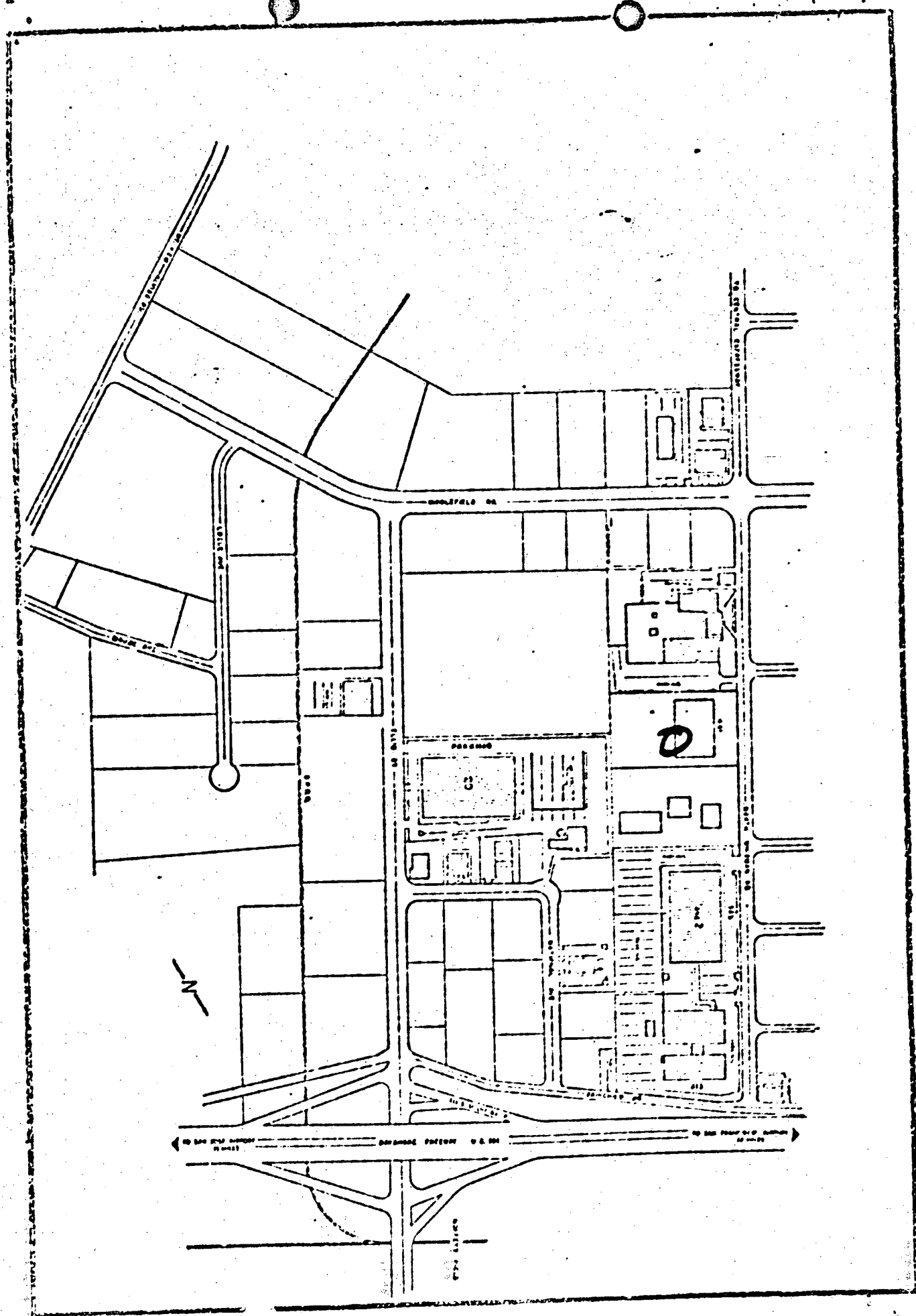
DATE: April 13, 1976 NO. 015-7-79  
NAME OF ORGANIZATION: Fairchild Semiconductor  
ADDRESS: 464 Ellis Street

GENERAL CONDITIONS

1. This permit is issued under the ordinances and regulations of the City of Mountain View currently in effect, but all discharges hereunder shall comply with all ordinances and regulations of the City and all other applicable local, state, and federal regulations, whether now in effect or hereafter adopted or amended.
2. Any violation of the terms of this Permit or the ordinances or regulations of the City shall be grounds for revocation.
3. If any proposed revisions in plant operations are expected to cause significant changes in waste water quality or quantity (25 percent or more, or 25,000 gallons per day) from that given in approved Permit information, an application for an amended permit must be submitted for approval detailing the nature of the changes.
4. In accordance with Section 35.32.8 of the City Code, accidental discharges of industrial wastes shall be reported immediately to the Public Works Department, telephone number 967-7211, Ext. 270, during normal office hours, or to the Fire Department, telephone number 968-4415, on holidays or after normal office hours AND to the Palo Alto Regional Water Quality Control Plant, telephone number 329-2598 so that appropriate countermeasures may be taken.
5. This Permit is not transferable without prior written consent of the Director of Public Works. In general, a change of ownership will require a new permit.
6. The issuance of this permit does not constitute a warranty that the design capacity of the sewage collection and treatment system is sufficient to accommodate peak sewage flows from all dischargers who may now or hereafter be connected to the system. Pursuant to Sec. 35.32.1(d) the City reserves the right to impose restrictions on sewage discharges where necessary in the judgment of the City to assure the proper functioning in the sewerage system.

SPECIFIC CONDITIONS

1. This permit is for a period ending on July 1, 1977 but shall be automatically renewed for up to four (4) additional successive one-year periods unless the City shall give written notice of nonrenewal at least thirty (30) days prior to the annual renewal date.
2. This permit applies to industrial waste discharges at the following location(s) only:  
Building 13 - 441 Whisman Road  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Your attention is called to the fact that flow rates shown on the permit application exceed per-acre design flows of the sewers serving the above locations. Restrictions or additional charges may be imposed in accordance with Sec. 35.32.1(d) of the City Code should peak sewage flows from the total upstream acreage approach the capacity of these sewers.



APPLICATION FOR INDUSTRIAL WASTES DISCHARGE PERMIT, ITEM C.

1. Type of Industry and Nature of Products

Fairchild Semiconductor processes silicon metal into electronic semiconductor devices.

2. Chemicals used in semiconductor device processing are:

Gases

Nitrogen  
Hydrogen  
Oxygen  
Argon  
Hydrogen chloride  
Chlorine  
Compressed air  
Ammonia

Liquids

Sulfuric acid  
Nitric acid  
Hydrofluoric acid  
Hydrochloric acid  
Acetic acid  
Phosphoric acid  
Ammonium fluoride  
Ammonium hydroxide  
Acetone

Liquids

Methanol  
Isopropanol  
Methylene chloride  
Trichloroethane  
Detergents  
Aluminum sulfate  
Sodium carbonate  
Sodium hydroxide  
Freon  
Glycerin  
Xylene

3. Waste treatment facilities

Neutralization of acids is provided by injection of ammonia into mixing tanks with continuous monitoring and control. Fluoride solutions are captured and disposed of separately, not into the city sewer.

In Building No. 18 a cyanide destruction system operates to destroy and convert cyanides to nitrogen and carbon dioxide. The final effluent is neutralized to a pH between 6 and 9.

Characteristics of exceptional industrial wastes. None.

5. No radioactive wastes are discharged.

6. Organic solvents are captured for storage and recycling.